Contents

Vol. 113, No. 1—2, 1994

Original Papers

Cloud Point Extraction of Napropamide and Thiabendazole from Water and Soil
G. Stangl, R. Niessner 1

Simultaneous Kinetic Determination of Chlorpyrifos and Carbaryl Based on Differential Degradation Processes in Alkaline Oxidative Medium
A. Espinosa-Mansilla, F. Salinas, A. Zamoro 9

Preparation and Characterization of Electrophoretically Deposited High-Temperature Superconductor Coatings
M. Ochsenkühn-Petropulu, P. Tarantilis, G. Parissakis, V. Psycharis, E. Moraitakis, D. Niarchos 19

Spectrofluorimetric Determination of Traces of Bromide
J. L. Vilchez, E. Manzano, R. Avidad, I. Orbe, L. F. Capitán-Vallvey 29

Spectrophotometric Determination of Molybdenum(V) by Extraction of its 2-(2′-Furyl)-3-Hydroxychromone Complex
R. Dass, J. R. Mehta 37

Influence of Structural Changes on the Ion Selectivities of Magnesium Ionophores Based on Malonic Acid Diamides
J. O'Donnell, B. Rusterholz, B. Aebersold, D. Rüegg, W. Simon, E. Pretsch . . . 45

Complexometric Determination of Mercury(II) in Waters by Spectrophotometry of its Dithizone Complex
F. Théraulaz, O. P. Thomas 53

Manganese(III) Oxidations of Benzolhydrazine, Aroxyacetylhydrazine, Semicarbazide, Thiosemicarbazide and their Derivatives in Pyrophosphate Media
B. S. Sherigara, I. Pinto, K. I. Bhat 61

Third-Order Derivative Spectrophotometric Determination of Phosphate as Ternary Complex with Molybdate and Rhodamine 6G
S. Kartikeyan, T. Prasada Rao, C. S. P. Iyer, A. D. Damodaran 71

Spectrophotometric Determination of Mercury with 5,10,15,20-Tetrakis-(3-chloro-4-sulfophenyl)porphine by Flow Injection Analysis
X.-J. Peng, Q.-K. Mao, J.-K. Cheng 81

Preconcentration and Determination of Naphthalene in Air and Water Using Activated Carbon Adsorption, Carbon Disulfide Extraction and Gas Chromatography
F. Sun 91

Investigation of Porphyrins and Metalloporphyrins by Liquid Matrix-Assisted Laser Desorption Mass Spectrometry
Y. L. Kim, S. Zhao, A. G. Sharkey, D. M. Hercules 101

Polarographic Behaviour and Determination of Paracetamol and Salicylamide After Treatment with Nitrous Acid
M. I. Walash, A. M. El-Brashy, M. A. Sultan 113

News Section

Announcements 125

Conference Calendar 128

Vol. 113, No. 3—6, 1994

Seventy Years of Service
H. Malissa, Sr. 133

Original Papers

2-Pyridylaldehydebenzoylhydrazone Derivatives as Highly Selective Precolumn Chelating Reagents for Nickel(II) Ion in Kinetic Differentiation Mode High-Performance Liquid Chromatography
N. Iki, H. Hoshino, T. Yotsuyanagi 137

A Neuro-Fuzzy System for X-Ray Spectra Interpretation
B. Walczak, E. Bauer-Wolf, W. Wegscheider 153

Determination of Nifedipine in Human Plasma by High Performance Liquid Chromatography Using Column-Switching Technique
G. Horvai, A. Hrabéczy-Páll, V. Horváth, I. Klebovich 171

Surface Analysis with Atomic Force Microscopy through Measurement in Air and Under Liquids
G. Friedbacher, T. Prohaska, M. Grasserbauer 179

Determination of Citric Acid by Means of Competitive Complex Formation in a Flow Injection System
A. Krug, R. Kellner 203

Potassium-Selective Optrode Based on an Immobilized Fluorogenic Crown Ether
M. E. Díaz-García, F. Alava-Moreno, A. Sanz-Medel 211

Potentiometric Discrimination of Organic Amines by Liquid Membrane Electrodes Based on a Long Alkyl Chain Derivative of β-Cyclodextrin
K. Odashima, H. Hashimoto, Y. Umezawa 223

Identification and Classification of Airborne Soot Particles Using an Automated SEM/EDX
P. Fruhstorfer, R. Niessner 239

Multi-Element Characterization of Silicon Nitride Powders by Atomic and Mass Spectrometric Solution Methods
M. Franek, V. Krivan, B. Gercken, J. Pavel 251

An Investigation of Laser Microprobe Mass Spectrometry (LAMMS) for Polymer Surface Treatment and its Inhomogeneity
T. Tsugoshi, K. Furuya, T. Kikuchi, H. Kobayashi, M. Ueno 261

Separation and Determination of Dissolved and Particulate Humic Substances in River Water
M. Hiraide, T. Shima, H. Kawaguchi 269

The Use of Optical Emission Spectrometry with Microwave Induced Plasma (MIP) Discharges in a Surfatron Combined to Different Types of Hydride Generation for the Determination of Arsenic
S. Luge, J. A. C. Broekaert 277

Interferences in Ultratrace Speciation of Organolead and Organotin by Gas Chromatography with Atomic Spectrometric Detection
J. Szpunar-Łobińska, M. Ceulemans, W. Dirkx, C. Witte, R. Łobiński, F. C. Adams 287

Experimental Study of Isopycnic Focusing Generated by Coupled Electric and Gravitational Field Forces: Use in Thin Layer Focusing and Focusing Field-Flow Fractionation
J. Janča, R. Audebert 299

Precision and Accuracy of Laser Ablation-ICP-MS Analysis of Rare Earth Elements with External Calibration
H. Cousin, B. Magyar 313

Study of the Complexation Chemistry and Speciation of Thallium for On-line Preconcentration with Immobilised Quinolin-8-ol
B. Mohammad, A. M. Ure, D. Littlejohn 325

Modulated Potential Electrogenerated Chemiluminescence of Luminol and $Ru(bpy)_3^{2+}$
G. P. Jirka, T. A. Nieman 339

Impedance Laser Spectroscopy in a Small RF-Excited Neon Discharge
J. Franzke, M.-A. Bratescu, D. Veza, K. Niemax 349

Qualitative and Semi-Quantitative Analysis in ICP-AES Using Multivariate Calibration
C. Schierle, M. Otto 357

Detection of Hydroperoxides in Combustion Aerosols by Supercritical Fluid Extraction Coupled to Thin-Layer Chromatography
G. Esser, D. Klockow 373

Certification of the Mass Fractions of Ca, Cu, Cl, I, Fe, K, Mg, P, Pb, N, Na and Zn in Skim Milk Powder
Ph. Quevauviller, G. N. Kramer, B. Griepink 381

News Section

Conference Calendar 395

Abstracted/Indexed in: Current Contents, SCI, ASCA, Analytical Abstracts, Biosis, Chemical Abstracts, Engineered Materials Abstracts, Metals Abstracts

Printed on acid-free paper